

WHAT IS CLAIMED IS:

1. A floor mopping assembly, comprising:
  - a first roller configured to let out a web mounted on a roll;
  - a second roller configured to reel in the web;
  - 5 a motor system configured to cause transfer of the web between the first roller and the second roller;
  - a pad configured to press the web against a surface; and
  - a housing to enclose the motor system, the first roller, the second roller and the pad, wherein the motor system, the first and second rollers, and the pad
  - 10 are mounted in the housing such that the motor causes transfer of the web between the first and second rollers and between the pad and the surface.
2. The assembly of Claim 1, wherein the housing is part of a cleaning robot.
- 15 3. The assembly of Claim 2, wherein the cleaning robot is remotely controlled.
4. The assembly of Claim 2, wherein the cleaning robot is autonomous.
- 20 5. The assembly of Claim 4, wherein the cleaning robot disposes of the web after it has been soiled.
6. The assembly of Claim 1, wherein the pad is compliant and non-absorbent.
- 25 7. The assembly of Claim 1, wherein the pad is closed-cell foam or self-skinning open-cell foam.
8. The assembly of Claim 1, wherein a portion of the roll of web is
- 30 moistened prior to being pulled by the motor driven roller.

9. The assembly of Claim 1, wherein the roll of web is encased in a watertight compartment.

10. The assembly of Claim 1, wherein the web comprises a paper-based material.

11. The assembly of Claim 1, wherein the web comprises a cloth-based material.

12. The assembly of Claim 1, wherein the roll of web is encased in a disposable assembly.

13. A floor mopping assembly, comprising:  
a computerized mobile chassis;  
a first roller configured to let out a roll of webbing;  
a second roller configured to reel in the webbing; and  
a motor system configured to cause transfer of the webbing between the first roller and the second roller, wherein the motor system and the first and second rollers are conveyed by the chassis.

14. The assembly of Claim 13, additionally comprising a housing to enclose the chassis, the motor system, the first roller and the second roller, wherein the motor system, and the first and second rollers, are mounted such that the motor causes transfer of the webbing between the first and second rollers and one of the rollers is configured to rest on the surface.

15. The assembly of Claim 13, wherein the chassis includes at least one drive motor configured to provide mobility.

16. The assembly of Claim 13, wherein the chassis includes a processor configured to control the motor system.

17. The assembly of Claim 13, wherein the roll of webbing is encased in a watertight compartment.

5 18. The assembly of Claim 13, wherein the roll of webbing is encased in a disposable assembly.

19. A floor mopping assembly, comprising:  
a computerized mobile chassis;  
10 a first means for letting out a portion of webbing;  
a second means for taking up the webbing; and  
a motor means for causing transfer of the webbing between the first means and the second means.

15 20. A method of mopping a surface with a floor mopping device, the method comprising:  
a) connecting a roll of webbing on a feed roller to a take-up roller;  
b) moving the floor mopping device without human intervention;  
c) pressing on a portion of the webbing such that the webbing cleans the  
20 surface; and  
d) transferring the portion of the webbing to the take-up roller.

21. The method of Claim 20, additionally comprising repeating b)-d) whereby an entire floor surface is mopped clean.

25 22. The method of Claim 20, wherein the transferring includes moving the webbing via a motor system.

30 23. The method of Claim 20, wherein the transferring includes determining when the webbing is soiled.

24. The method of Claim 20, wherein the transferring includes determining when the mopping device has cleaned a predetermined area of the surface.

5 25. The method of Claim 20, additionally comprising moistening a predetermined amount of the webbing prior to the pressing.

26. The method of Claim 25, wherein the moistening comprises applying a cleaning agent to the webbing.

10 27. The method of Claim 25, wherein the moistening comprises applying a wax to the webbing, such that the surface is waxed.